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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/986,258	11/08/2001	Richard B. Mignogna	80,253	5017	
26384	7590 09/10/2003				
NAVAL RESEARCH LABORATORY			EXAMINER		
CODE 1008.	-	FAYYAZ, NASHMIYA SAQIB			
4555 OVERLOOK AVENUE, S.W. WASHINGTON, DC 20375-5320			ART UNIT	PAPER NUMBER	
	,		2856		
			DATE MAILED: 09/10/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE U.S. Patent and Trader or Office Address: COMMISSIONER FOR PATENTS

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APPLICATION NO./ CONTROL NO.	FILING DATE	ILING DATE FIRST NAMED INVENTOR / PATENT IN REEXAMINATION		ATTORNEY DOCKET NO.	
			EXAMINER		
			ART UNIT	PAPER	

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Commissioner for Patents

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•		Application No.	Applicant(s)	
	,	09/986,258	MIGNOGNA ET AL.	
	Office Action Summary	Examiner	Art Unit	
		Nashmiya S. Fayyaz	2856	
Period fo	The MAILING DATE of this communication a	appears on the cover she t w	vith the correspond nc address -	•
A SH THE - Exte after - If the - If NG - Failu - Any	IORTENED STATUTORY PERIOD FOR REF MAILING DATE OF THIS COMMUNICATION INSIGNS of time may be available under the provisions of 37 CFR or SIX (6) MONTHS from the mailing date of this communication. The period for reply specified above is less than thirty (30) days, a competitive provision of the	N. 1.136(a). In no event, however, may a reply within the statutory minimum of thiod will apply and will expire SIX (6) MO stute, cause the application to become A	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this communica BANDONED (35 U.S.C. § 133).	ition.
1)	Responsive to communication(s) filed on 2	27 June 2003		
2a)⊠	, , , , , , , , , , , , , , , , , , , ,	This action is non-final.		
3)	Since this application is in condition for alloclosed in accordance with the practice und	owance except for formal m		ts is
· _	ion of Claims			
4)⊠	Claim(s) 1-7 is/are pending in the application			
	4a) Of the above claim(s) is/are without	drawn from consideration.		·
5)	· · ——			
· · · · ·	Claim(s) <u>1-7</u> is/are rejected.			
·	Claim(s) is/are objected to.			
, —	Claim(s) are subject to restriction and	d/or election requirement.		
	ion Papers The specification is objected to by the Exam	iner		
,	The drawing(s) filed on is/are: a) ac		the Examiner	
.0/	Applicant may not request that any objection to	, , ,		
11)	The proposed drawing correction filed on	= : :		
,	If approved, corrected drawings are required in			
12)	The oath or declaration is objected to by the	Examiner.		
Priority	under 35 U.S.C. §§ 119 and 120			
13)	Acknowledgment is made of a claim for fore	eign priority under 35 U.S.C.	§ 119(a)-(d) or (f).	
a)	☐ All b)☐ Some * c)☐ None of:			
	1. Certified copies of the priority docume	ents have been received.		
	2. Certified copies of the priority docume	ents have been received in	Application No	
* (3. Copies of the certified copies of the papplication from the International See the attached detailed Office action for a	Bureau (PCT Rule 17.2(a))		
	Acknowledgment is made of a claim for dome	•		eation)
•	a) The translation of the foreign language	• •		ation).
	Acknowledgment is made of a claim for dom-	•		
Attachmer	nt(s)			
2) 🔲 Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO-1449) Paper No(s	5) Notice o	v Summary (PTO-413) Paper No(s) f Informal Patent Application (PTO-152)	_·

Application/Control Number: 09/986,258

Art Unit: 2856

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koch et al.-U.S. Patent #5,723,791.

As to claims 1-7, Koch et al disclose a high resolution coating thickness gauge and method for determining the thickness of a coating on a substrate including a transducer 12 for transmitting signals into the coating through a coupling fluid gel, receiving first signals reflected from the transducer (gel fluid)/ coating interface and second signals reflected from the coating/substrate interface, and a controller for calculating thickness of the coating based on the sampled data where the controller includes a deconvolving analysis so as to distinguish between the signals and further includes a peak detector in the analysis system 18 for determining the echo with the maximum peak 191 and then determination of the thickness is derived via the acoustic velocity, see Figs 2 and col. 5, lines 5 e.g. seq. It is noted, that the peak amplitude is determined in the time domain representation of the reflection rather than the amplitude the frequency domain. However, it is old and very well-known the same amplitude peaks would be found in the time and frequency domains and that recorded peak time is merely an inverse function of frequency and the thickness would be calculated using the time multiplied by the acoustic velocity yielding the same result. Therefore, determination of the peak amplitude in the frequently domain

Application/Control Number: 09/986,258 Page 3

Art Unit: 2856

as opposed to the time domain as disclosed by Koch et al is considered to have been an obvious matter of design choice of known equivalents and would have been obvious to one of ordinary skill in the ultrasonic art to have substituted one for the other. See In re Fout, 675, F.2d 297, 301, 213 USPQ 532, 536 (CCPA 1982). As to claim 3, note col. 13, lines 4-10. As to claims 4-7, note transducer 12 with piezo for transmitting and receiving signals and a sampler for receiving reflected signals, and col. 11 which describes the deconvolving as employing Fourier transforms.

3. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, on line 13, "the amplitude" lacks antecedent basis. In claim 2, isn't the "reference signal" the same as the "back scattered signal" of claim 1? In claim 4, on line 11, it is unclear what is "operably associated with...". In claim 7, "the reference signal" lacks antecedent basis.

- 4. Applicant's arguments with respect to claim have been considered but are moot in view of the new ground(s) of rejection.
- 5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Application/Control Number: 09/986,258 Page 4

Art Unit: 2856

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final

6. Any inquiry concerning this communication should be directed to N. Fayyaz at telephone number (703) 305-4891.

N FAYYAZ/pj

09/04/03

action.

HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

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